

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	Page	1 of 2
<i>ENGINEERING & COMPLIANCE</i>	A/N	404507
APPLICATION PROCESSING AND CALCULATIONS	Processed By	KH
	Checked By	
	Date	12/14/06

Applicant's Name: Prime Wheel

Mailing Address: 17705 S. Main
Gardena, CA 90746

Equipment Location: 17704 Broadway St., Carson

Equipment Description:

APPLICATION NO. 404507:

FURNACE NO. 2, ALUMINUM MELTING, REVERBERATORY TYPE, HI T.E.Q., 9,700 POUND CAPACITY, 10' - 3"W. x 17' - 10"L. x 9' - 5"H., WITH THREE NORTH AMERICAN MODEL 4832 NATURAL GAS-FIRED LOW NOX BURNERS, 10,000,000 BTU/HR TOTAL, AND ONE 25-HP COMBUSTION BLOWER.

HISTORY:

Application was received on: 7/26/02

Equipment installed: Yes

Violations recorded: None

The application filing was for change of permit conditions to increase the throughput and to remove the "standby" designation.

Throughput Increase	
From	To
tons/month	tons/month
1,152	1,440

(38.4 tons/day)

Previous permit: F 40910 (A/N 306209)

The processing was first delayed by a disagreement on PM and PM10 emission factors to be used in the emission calculations. The company conducted a source test to determine PM emissions from the furnace. Since the PM emission factor given by the company's test was too low compared to the District's established factor, the District conducted the tests after that to verify the results of the test conducted by the company. The processing was further delayed pending the retest by the company for CO emissions.

PROCESS DESCRIPTION

The equipment is for melting aluminum for making aluminum wheels.

CALCULATIONS:

See ATTACHMENT(S).

RULES EVALUATION

Rule 212:

This is not a significant project as defined by this rule. No public notice is required (The nearest school is 2112 feet from the facility).

Rule 401:

No visible emissions are expected from this type of equipment. Compliance is expected.

Rule 402:

Nuisance problems due to the operation of this equipment are unlikely.

Rule 404:

Flow rate, cfm	Concentration, gr/cf		
	Rule 404 Limit	Calculated	Compliance
5,673	0.098	0.004	Yes

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Rule 405:

	Emission Rate, lb/hr		
Process Weight, lb/hr	Rule 405 Limit	Calculated	Compliance
4,000	5.37	0.20	Yes

Rule 409:

This equipment is fired with natural gas. Compliance is expected.

REGULATION XIII - New Source Review

BACT:

	Req'd	Actual	Compliance
NOx, ppm @ 3% O ₂	60	60	Yes
SOx	Nat. Gas	Nat. Gas	Yes
PM ₁₀	Nat. Gas & Clean Charge	Nat. Gas & Clean Charge	Yes

Compliance

YES

Modeling:

The emissions are less than the amounts in Table A-1 of Rule 1303. No further analysis is required. Complies.

Offsets:

VOC & NOx:

The facility PTE is more than the amounts in Table A of Rule 1304. External offsets are required.

Other pollutants:

The facility PTE is less than the amounts in Table A of Rule 1304. No offsets are required.

Rule 1401:

With the above rating and operating load it is expected that MICR will be less than 1 in a million and HI will be less than 1. Complies.

DISCUSSIONS

NOx and VOC ERC are required.

The company holds 14 lbs of VOC ERC (AQ004707), enough to offset the VOC emission increase.

The company holds 7 lbs of NOx ERC (AQ005495), not enough to offset the NOx emission increase.

Based on information submitted with the application and the above evaluation, it is determined that, if the required NOx ERC are provided, the equipment will operate in compliance with all the applicable rules and regulations of the District.

RECOMMENDATIONS

Hold Permit to Operate pending ERC & EPA review.